

Notice of Allowability

Application No.

10/817,504

Examiner

Duc T. Doan

Applicant(s)

KNUPFER ET AL.

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed 11/7/2007.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Status of Claims

Claims 1-22 have been presented for examination in this application. In response to the last office action, Applicant filed a response/amendment on 8/23/2007 and supplemental amendments on 11/07/2007 in which the specification has been amended, drawings have been amended with the replacement sheet for Fig 4, claims 1-7,10,12,17 and 21-22 have been amended. As the result, claims 1-22 are pending in this application.

The applicant's remarks and amendments to the claims have been considered with the results that follow,

Claims 1-22 are allowed.

Allowable Subject Matter

Claim 1 is allowed because the prior art of record does not teach or suggest that "...a command-decoding device configured for decoding external commands received from a source external to the data memory circuit; .. a command buffer device configured for buffer-storing an external command received in a critical operating state period during which execution of the external command is impermissible and for releasing the buffer-stored external command for execution after end of the critical operating state period, wherein the command buffer device receives from the control device a multi-bit status signal which indicates the critical operating state period and a critical operating state selected from one of a plurality of critical operating

states, wherein the selected critical operating state is determined by activation of multiple bits of the multi-bit status signal..." as recited in the claim, and in combination with other remaining claimed subject matter set forth in the claimed invention.

Claim 10 is allowed because the prior art of record does not teach or suggest that "...a command decoder configured for receiving external commands from a source external to the data memory circuit, the command decoder having a plurality of command-buffer circuits for buffer-storing external commands received during critical operation state periods when execution of the commands is impermissible and for releasing the buffer-stored external commands for execution after the critical operation state periods, wherein each command-buffer circuit receives a multi-bit status signal which indicates the critical operating state period and a critical operating state selected from one of a plurality of critical operating states, wherein the selected critical operating state is determined by activation of multiple bits of the multi-bit status signal ..." as recited in the claim, and in combination with other remaining claimed subject matter set forth in the claimed invention.

Claim 17 is allowed because the prior art of record does not teach or suggest that "...a decoder means for receiving and decoding commands, the decoder means having a plurality of command-buffer means for buffer-storing commands received during critical operation state periods when execution of the commands is impermissible and for releasing the buffer-stored commands for execution after respective critical operation state periods, wherein each command-buffer means receives a multi-bit status signal which indicates the critical operating state periods

and a critical operating state selected from one of a plurality of critical operating states, wherein the selected critical operating state is determined by activation of multiple bits of the multi-bit status signal..” as recited in the claim, and in combination with other remaining claimed subject matter set forth in the claimed invention.

Claim 21 is allowed because the prior art of record does not teach or suggest that “..receiving and analyzing a multi-bit status indication signal which identifies a critical operating state selected from a plurality of critical operating states that is not compatible with the execution of an external command, wherein the multi-bit status indication signal is provided by an internal control device of the memory device to a command decoder of the memory device, wherein the selected critical operating state is determined by activation of multiple bits of the multi-bit status signal..” as recited in the claim, and in combination with other remaining claimed subject matter set forth in the claimed invention.

Claim 22 is allowed because the prior art of record does not teach or suggest that “
...a command-decoding device configured for decoding external commands received from a source external to the data memory circuit; .. a command buffer device configured for buffer-storing an external command received in a critical operating state period during which execution of the external command is impermissible and for releasing the buffer-stored external command for execution after end of the critical operating state period, said command-buffer device
...receiving and analyzing a multi-bit status indication signal from the control device indicative of a critical operating state selected from a plurality of critical operating states which are not

compatible with execution of the external command, wherein the selected critical operating state is determined by activation of multiple bits of the multi-bit status signal.." as recited in the claim, and in combination with other remaining claimed subject matter set forth in the claimed invention.

The remaining dependent claims, not specifically mentioned, are allowed for the same rationale as the independent claim(s) being based from.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Doan whose telephone number is 571-272-4171. The examiner can normally be reached on M-F 8:00 AM 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**GARY PORTKA
PRIMARY EXAMINER**

